

Appl. No. 10/735,613
Amendment dated: October 31, 2007
Reply to OA of: September 11, 2007

REMARKS

This is in response to the Official Action of September 11, 2007. Applicant has amended the claims in order to more precisely define the scope of the present invention.

Specifically, Applicant has amended claims 14 and 15 to recite a permanent magnet ring wherein a magnetically attracting force on said N and S poles is strong and said unit permanent magnets are strongly connected with each other in a line or point contact manner such that the ring shape can be kept as a whole because said unit permanent magnets are uniaxial anisotropic magnets; and wherein a magnetic flux from the magnetic poles of each of said unit permanent uniaxial anisotropic magnets forms a closed magnetic path along the circumference of the permanent magnet ring so that the magnetic flux does not act directly on the area inside of the permanent magnet ring despite the strong magnetically attracting force, a leakage magnetic flux acts on the area inside of the permanent magnet ring, and magnetic action caused by the leakage magnetic flux density is restrained to be weak as compared to the magnetic action caused by the magnetic flux from the magnetic poles forming the closed magnetic path and which are due to the uniaxial anisotropic nature of said unit permanent magnets.

Support for these amendments may be found throughout the specification as originally filed, including, e.g., page 31, line 20 through page 36, line 12. Applicant respectfully submit that no new matter is introduced into the application by the amendments to the claims presented herein and the claims are in compliance with the requirements of 35 U.S.C. §112.

Turning now the prior art rejections set forth in the outstanding Official Action, the rejection of claim 15 under 35 U.S.C. §103(a) as being unpatentable over the English translation of Sakurai et al. (JP 11-103915) in view of Takeshita et al. (US Pat. No. 4,981,532) and Okinaka et al. (US Pat. No. 4,067,783) and as evidenced by Applicant's admissions has been carefully considered but is most respectfully traversed in light of the following comments.

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Applicant wishes to direct the Examiner's attention to the basic requirements of a prima facie case of obviousness as set forth in the MPEP § 2143. This section states that to establish a prima facie case of obviousness, three basic criteria first must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Section 2143.03 states that all claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Applicant also notes MPEP §2143.01, which states in part that, if a proposed modification would render the prior art invention unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

The outstanding Official Action refers back to the Office Actions dated March 2, 2007 and May 2, 2006 for a detailed explanation regarding how the cited references are considered to disclose the claimed invention. With respect to the Sakurai reference, the most relevant text appears to be set forth in the Office Action dated May 2, 2006, although the Sakurai text is presented in connection with a rejection of claims which are now longer pending in the instant application.

The portion of the May 2, 2007 Office Action discussing the pertinency of the Sakurai reference urges that Sakurai discloses a permanent magnet ring substantially

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similar to the permanent magnet ring disclosed and claimed in the instant application. Of specific note, the Official Action urges that paragraphs [0005], [0006] and [0010] disclose unit permanent magnets that are uniaxial anisotropic magnets. Applicant respectfully traverses this position and, more generally, the position that any of the cited references disclose an anisotropic magnet for the unit permanent magnets of the claimed permanent magnet bracelet.

To begin with, Applicant notes that the unit permanent magnets that make up the permanent magnet bracelet recited in claims 14-16 of the instant application are uniaxial anisotropic unit permanent magnets that are attracted to each other on the magnetic poles at the curved surfaces of each unit permanent magnet, which thereby causes the unit permanent magnets to form a ring shape. Because the unit permanent magnets are each anisotropic, the magnetic attracting force is concentrated in one direction. Thus, as recited in the amended claims described above, the magnetic attracting force generated between unit permanent magnets is high due to its concentrated direction. The strong magnetic force in a concentrated direction makes the bracelet formed of unit permanent magnets difficult to separate and maintains the ring shape.

In spite of the strong magnetic force, there is no adverse effect to a portion of the body where the ring is worn, such as a wrist or neck, because the magnetic flux generated from the magnetic poles forms a closed magnetic path generally in the concentrated direction, i.e, along the path of the bracelet. At the same time, leakage magnetic flux acts on a portion of the body where the ring is worn at a suitable level, providing beneficial health advantages.

Since the magnetic force concentrates in one direction, the magnetic flux density from the magnetic poles can be made high so as to make the magnetically attracting force strong in those parts, while the magnetic act by the leakage flux can be restrained to an appropriate amount. In this manner, adverse effects to portions of the body where the ring is worn can be prevented.

This design is illustrated by the attached diagram. A magnetic flux density on a magnetic pole A (a) where uniaxial anisotropic unit permanent magnets 21a and 21b are attached to each is other is made high, for example 5,000 to 7,000 gauss (G), as the result of magnetization in a concentrated direction. However, even when the force is made strong in this manner, the magnetic flux density becomes gradually lower according to positional changes in the vertical direction apart from the magnetizing direction X-X. At position B or b, the flux density may be 2,500 to 5,000 G, whereas the flux density at position H or h may be 50 to 100 G.

Thus, a leakage magnetic flux on a portion 2 where the ring is worn is restrained to be low, so that a magnetic act on a portion of a human body where the ring is worn can be properly restrained.

In contrast, when the unit permanent magnets are not anisotropic, the magnetic force is not concentrated in a single direction. Rather, the magnetic force scatters and no strong forces in a single direction are created. There is no effective difference between strength of magnetic force on the parts where unit permanent magnets are magnetically attracted and that of magnetic force by a leakage magnetic flux because the magnetic forces do not concentrate in a single direction. Accordingly, if the magnetic force is made strong in order to strengthen the magnetic attracting force between unit permanent magnets, magnetic force by leakage flux will also be strong and act on a portion of the body where the bracelet is worn in a manner that may cause adverse effects to the wearer. If the magnetic force by the leakage flux is made weak to prevent adverse effects to the body of the wearer, the magnetically attracting force between the unit permanent magnets also becomes weak, resulting in the bracelet being easily detached.

Returning to the Sakurai reference, Applicant respectfully notes that no portion of the reference discloses that the magnets used therein are anisotropic. Neither the paragraphs cited in the Official Action as disclosing anisotropic magnets nor any other portion of Sakurai disclose anisotropic magnets as claimed. Absent a clear teaching or suggestion in the reference that the magnets are anisotropic as claimed in the instant

application, Applicants respectfully submit that the Sakurai reference fails to disclose each and every element of the claimed invention.

Furthermore, Applicant respectfully submits that paragraph [0006] suggests that the magnets are not anisotropic. Specifically, paragraph [0006] of Sakurai states “[i]n order to avoid various magnetic materials surrounding the beads to become attracted to the beads making up the bracelet while allowing only the beads to be adsorbed to each other, it is necessary to reduce the quantity and density of the magnetic lines that radiate around the bracelet.” Applicant respectfully submits that if Sakurai disclosed an anisotropic magnet as recited in the claims of the instant application, such a problem would not be presented, since the magnetic force would already be concentrated in a single direction. In the claimed invention, the concentrated direction is the closed bracelet ring, and therefore the magnetic attraction is focused on keeping the unit permanent magnets together in a ring shape, not on attracting magnetic items surrounding the unit permanent magnets. In Sakurai, the magnetic forces do not appear to be in a concentrated direction, and therefore Sakurai must employ the casings described in the reference to cut down the stray magnetic forces traveling in a direction other than the direction of the ring of the bracelet.

Because Sakurai does not disclose anisotropic magnets, but rather appears to disclose magnets with scattered magnetic force, the bracelet of Sakurai is incapable of achieving the effect described above, i.e., a strong magnetic force between the unit permanent balls but a restrained magnetic leakage flux applied to the body of the wearer. Increasing the magnetic force between unit magnets increases the magnetic force everywhere, including the leakage flux to the body, while decreasing the magnetic force between unit magnets decreases the magnetic force everywhere, including the leakage flux to the body.

Applicant respectfully submits that neither the Takeshita nor the Okinaka reference remedy this deficiency of the Sakurai reference. Accordingly, since none of the references relied upon in support of the §103 rejection of claim 15, either standing alone or when taken in combination, disclose or suggest each and every feature of the

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claimed invention, Applicants respectfully submit that a proper §103 rejection according to the guidelines set forth in MPEP §2143 has not been established and should therefore be withdrawn.

The rejection of claim 14 under 35 U.S.C. §103(a) as being unpatentable over Sakurai, Takeshita, Okinaka, Applicant's admissions and further in view of Hart (US Pat. No. 5,195,335), Yellen (US Pat. No. 6,427,486), Lu (US Pub. App. No. 2004/0111005) and Jacobson (US Pat. No. 6,634,067) and the rejection of claim 16 under 35 U.S.C. §103(a) as being unpatentable over Sakurai, Takeshita, Okinaka, Applicant's admissions and further in view of Hoffman (US Pat. No. 4,517,217) have each been carefully considered but are most respectfully traversed in light of the following comments.

Applicant respectfully submits that none of the secondary references cited above remedy the deficiency of the Sakurai reference. That is to say, none of the secondary references disclose or suggest an anisotropic as recited in claims 14 and 16 of the instant application. Accordingly, since none of the references relied upon in support of the §103 rejection of claims 14 or 16, either standing alone or when taken in combination, disclose or suggest each and every feature of the claimed invention, Applicants respectfully submit that a proper §103 rejection according to the guidelines set forth in MPEP §2143 has not been established and should therefore be withdrawn.

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In view of the above comments and further amendments to the claims, favorable reconsideration and allowance of all of the claims now present in the application are most respectfully requested.

Respectfully submitted,
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